

**Ridgeway Arizona Oil Corp.
575 N. Dairy Ashford
Suite 210
Houston, TX 77079**

November 13, 2024

NMOCD District 1
1625 N French Dr.
Hobbs, NM, 88240

**RE: Site Assessment, Remediation and Closure Report
Haley Water Facility
NMOCD Reference No. NAB1906042331
GPS: Latitude 33.665939 Longitude -103.545737
UL "H", Section 34, Township 07S, Range 33E,
Roosevelt County, NM**

Ridgeway Arizona Oil Corp. (Ridgeway) has contracted Pima Environmental Services, LLC (Pima) to perform a site assessment, remediation and write a closure report for a produced water release that was discovered on February 13, 2019, at the Haley Water Facility (Haley). The initial C-141 form was submitted and approved on March 1, 2019. This incident was assigned Incident ID NAB1906042331, by the New Mexico Oil Conservation Division (NMOCD).

Site Information and Site Characterization

The Haley Water Facility is located approximately eleven (11) miles northwest of Milnesand, NM. This spill site is in Unit H, Section 34, Township 07S, Range 33E, Latitude 33.665939 Longitude -103.545737, Roosevelt County, NM. A Location Map can be found in Figure 1.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology in this area includes scattered lacustrine, playa, and alluvial deposits of the Tahoka, Double Tanks, Tule, Blanco, Blackwater Draw, and Gatuna Formations, the latter of which may be Pliocene at base; outcrops, however, are basically of Quaternary deposits. The soil in this area is made up of Amarose loamy fine sand, dry, having 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well drained. There is a low potential for karst geology to be present around the Haley (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 165 feet below grade surface (BGS). According to the United States Geological Survey well water data, depth to the nearest groundwater in this area is 222 feet BGS. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29

Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50' (Lack of GW data)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
>100'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg

Reference Figure 2 for a Topographic Map.

Release Information

NAB1906042331: On February 13, 2019, it was discovered that a pump malfunction had occurred releasing 50 bbls of produced water. A vacuum truck was called and was able to recover 30 bbls of standing fluid.

Site Assessment

On February 3, 2024, Pima mobilized personnel to perform a site assessment and collect soil samples. Grab soil samples were collected around the impacted area utilizing a hand auger. The laboratory results from this sampling event can be found in the following data table. A Site Map can be found in Figure 4.

2-3-2024 Soil Sample Results								
NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
Ridgeway- Haley Central Water Facility NAB1906042331								
Date: 2/3/2024		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S1	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	ND	ND	0	ND
	4'	ND	ND	ND	25.8	ND	25.8	ND
S2	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	ND	ND	0	ND
	4'	ND	ND	ND	ND	ND	0	ND
S3	1'	ND	ND	ND	59.9	90.2	150.1	ND
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	138	173	311	ND
	4'	ND	ND	ND	ND	ND	0	ND
S4	1'	ND	ND	ND	113	126	239	ND
	2'	ND	ND	ND	ND	ND	0	35.4
	3'	ND	ND	ND	ND	ND	0	ND
	4'	ND	ND	ND	ND	ND	0	ND
SW1	0-4'	ND	ND	ND	ND	ND	0	ND
SW2	0-4'	ND	ND	ND	ND	ND	0	ND
SW3	0-4'	ND	ND	ND	ND	ND	0	ND
SW4	0-4'	ND	ND	ND	ND	ND	0	ND
SW5	0-4'	ND	ND	ND	ND	ND	0	ND
SW6	0-4'	ND	ND	ND	ND	ND	0	ND
SW7	0-4'	ND	ND	ND	ND	ND	0	ND
SW8	0-4'	ND	ND	ND	ND	ND	0	ND
SW9	0-4'	ND	ND	ND	ND	ND	0	ND
SW10	0-4'	ND	ND	ND	ND	ND	0	ND
SW11	0-4'	ND	ND	ND	ND	ND	0	ND
BG1	1'	ND	ND	ND	ND	ND	0	ND

ND/0 – Analyte Not Detected

Remediation Activities

On October 3, 2024, Pima personnel mobilized to the site to begin excavating the release area. The estimated total volume of soil that was excavated from S3 was based on a 200 square foot area at an average depth of 3.5' totaling approximately 26 cubic yards. The total volume of soil that was excavated from S4 was based on a 200 square foot area at an average depth of 1.5' below ground surface totaling approximately 11 cubic yards. The contaminated soil was hauled and disposed of at Gandy Marley, Inc, an NMOCD-approved disposal facility. Then clean, like material was brought to the location to be used for backfilling. Figure 5 references an Excavation Map. Photographic Documentation is referenced in Appendix D.

On October 8, 2024, after Ridgeway submitted a 48-hour sampling notification (Appendix C). A total of four (4) confirmation composite samples representing no more than 200 square feet from the base and walls of the excavated areas were collected. All samples were put on ice, jarred, then delivered to Envirotech Analytical Laboratories for official analysis of all constituents listed in Table 1 19.15.29.12 NMAC. The sample results from this sampling event can be found in the data table below. A Confirmation Sample Map can be referenced in Figure 6. A complete Laboratory Report can be referenced in Appendix E.

10-8-2024 Confirmation Sample Results								
NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50 ')								
Ridgeway- Haley Central Water Facility NAB1906042331								
Date: 10/8/2024		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
CS1	4'	ND	ND	ND	ND	ND	0	ND
CS2	2'	ND	ND	ND	ND	ND	0	ND
CSW1	COMP	ND	ND	ND	ND	ND	0	ND
CSW2	COMP	ND	ND	ND	ND	ND	0	ND

ND/0 – Analyte Not Detected

Closure Request

Based on the laboratory reports, the contamination levels for all samples analyzed are under the regulatory limits as per the less than 50-foot depth to groundwater section of Table 1 19.15.29.12 NMAC. No further remediation activities are required for this incident.

Ridgeway has complied with the applicable requirements set forth in 19.15.29.12 NMAC and requests that this remediation closure report for incident ID NAB1906042331 be approved. Ridgeway understands that reclamation of this pad area once it is no longer needed for production or subsequent drilling operations will require an approved reclamation plan addressing a minimum of four feet of non-waste containing earthen material.

For questions or additional information, please feel free to contact:

Ridgeway Arizona Oil Corp – Charles Hinojosa – 713-574-7912 or chinojosa@pedevco.com.

Pima Environmental – DelRae Geller – 806-724-5391 or delrae@pimaoil.com.

Respectfully,

DelRae Geller

DelRae Geller

Project Manager

Pima Environmental Services, LLC

Attachments

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Site Map
- 5- Excavation Map
- 6- Confirmation Sample Map

Appendices:

- Appendix A – Referenced Water Surveys
- Appendix B – Soil Survey and Geological Data
- Appendix C - 48-Hour Sampling Notification
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Reports



Pima Environmental Services



Figures:

1. Location Map
2. Topographic Map
3. Karst Map
4. Site Map
5. Excavation Map
6. Confirmation Sample Map

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Location Map

Legend

-  11.97 Miles NW of Milnesand, NM
-  Haley Water Station

Haley Water Station

Milnesand 262

206

Google Earth


10 mi

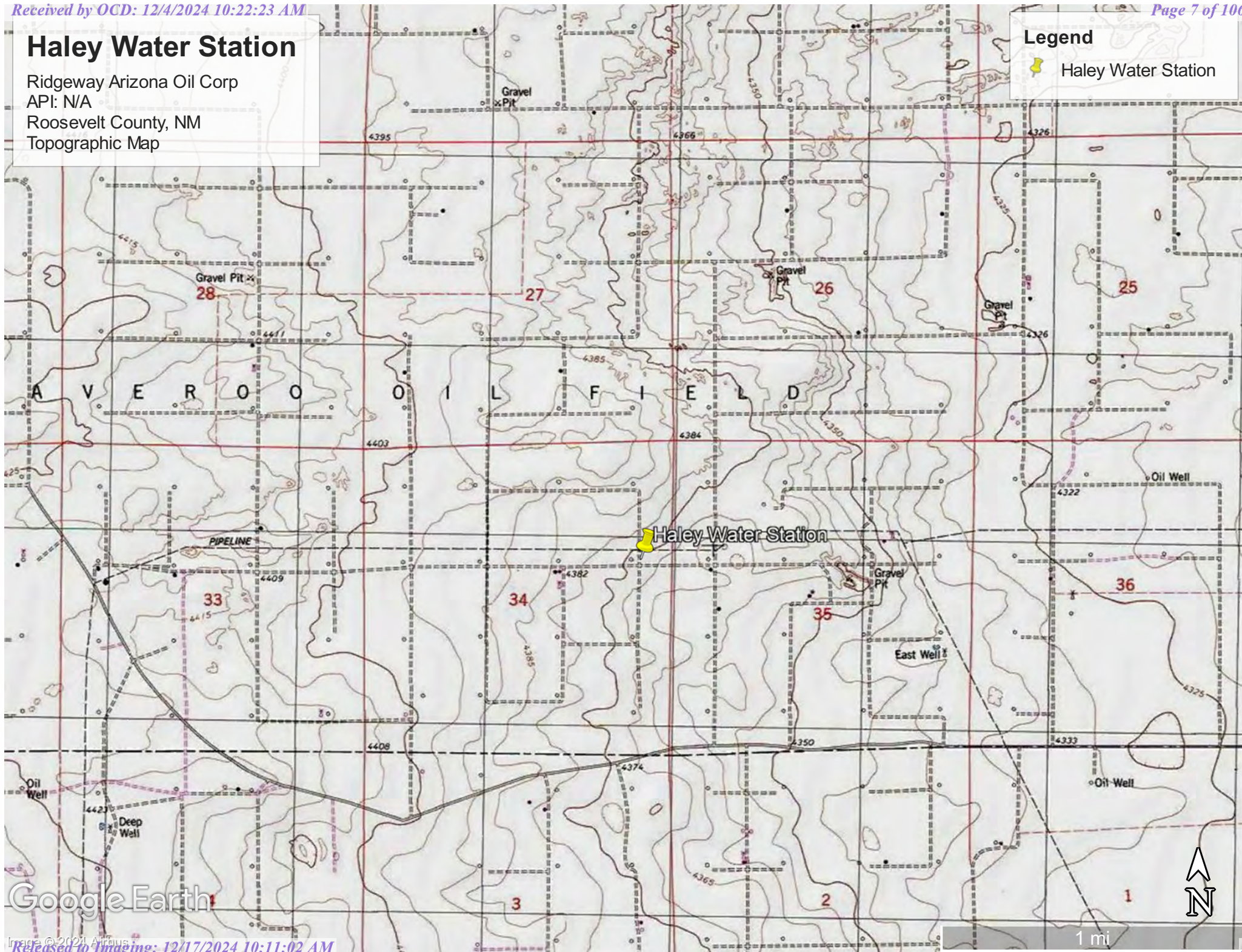


Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Topographic Map

Legend

 Haley Water Station








Google Earth

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Karst Map

Legend

-  Haley Water Station
-  High Karst
-  Low Karst
-  Medium Karst

 Haley Water Station

258

Google Earth


4 mi




Haley Water Facility

Ridgeway Arizona Oil Co.
API: N/A
Roosevelt County, NM
Site Map

Legend

 Haley Water Facility

 Spill 2,661 SQ ft



Haley Water Facility

SW11

S1

SW10

SW9

BG1

SW1

S2

SW8

SW2

S3

SW7

SW3

S4

SW6

SW4





SW5

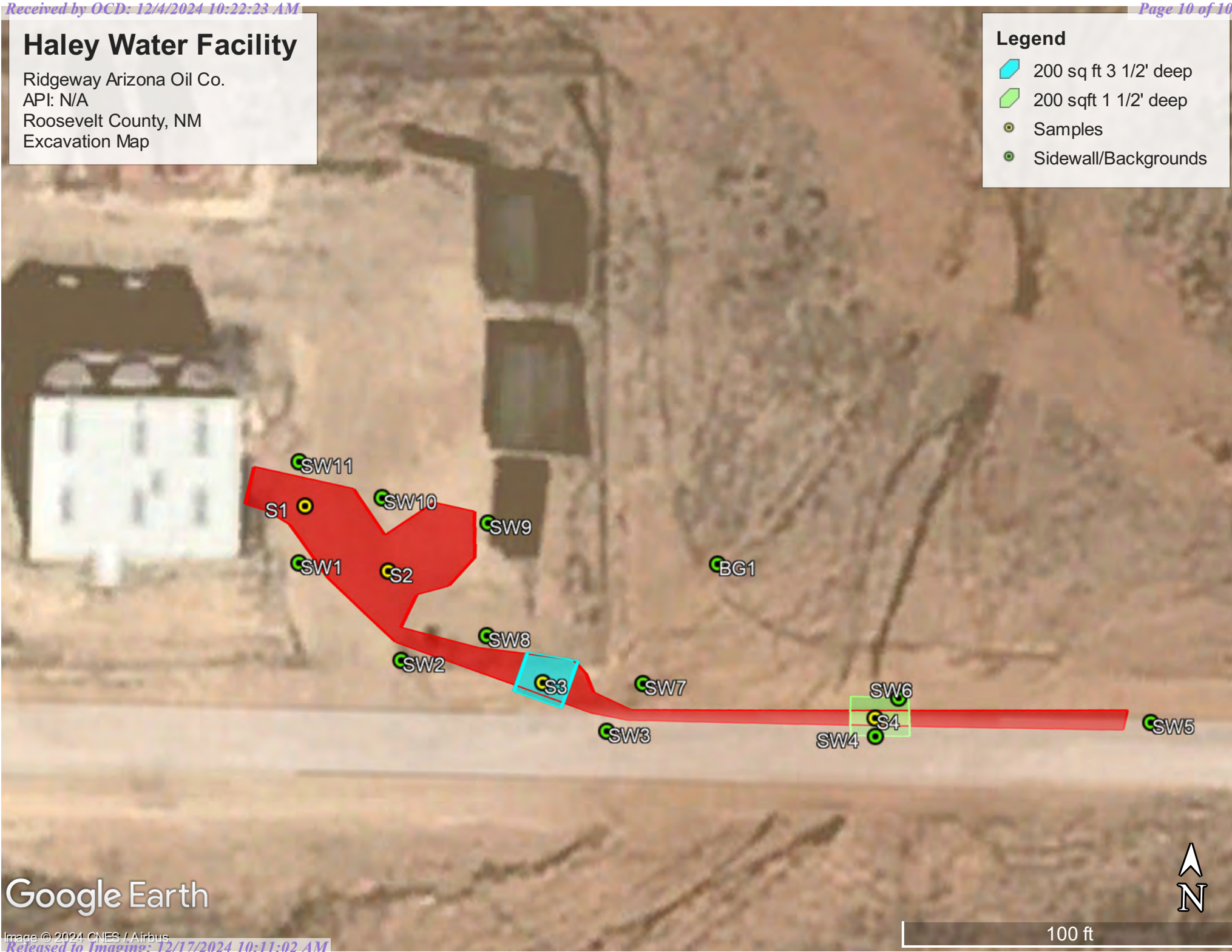


Haley Water Facility

Ridgeway Arizona Oil Co.
API: N/A
Roosevelt County, NM
Excavation Map

Legend

-  200 sq ft 3 1/2' deep
-  200 sqft 1 1/2' deep
-  Samples
-  Sidewall/Backgrounds



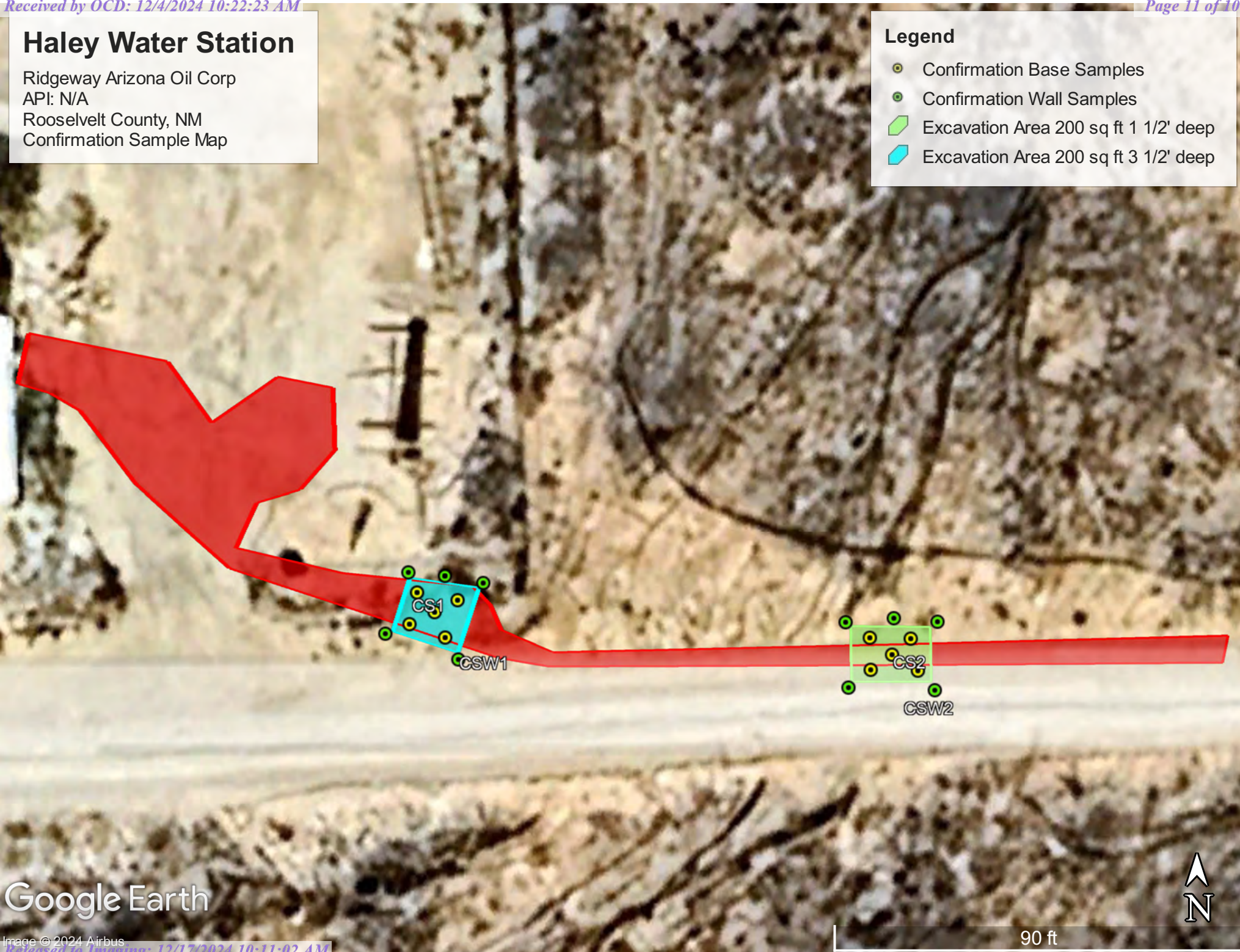
Google Earth

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Confirmation Sample Map

Legend

- Confirmation Base Samples
- Confirmation Wall Samples
- Excavation Area 200 sq ft 1 1/2' deep
- Excavation Area 200 sq ft 3 1/2' deep



Google Earth



Pima Environmental Services

Appendix A

Water Surveys:

OSE

USGS

Surface Water Map



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has been
replaced,
O=orphaned,
C=the file is
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
L 13691 POD1		L	LE	1	1	4	22	09S	32E	637362	3725298	2645	150		
CL 00385 POD1		CL	CH	3	3	4	15	08S	33E	634369	3720406	5692	349		
L 14097 POD1		L	LE	1	3	3	06	20S	35E	638740	3718500	8526	61	0	61
CL 00307 POD1		CL	CH	2	3	4	13	08S	32E	628014	3720298	8940	195	165	30
CL 00314 POD1		CL	CH	1	2	2	34	08S	33E	634611	3716897	9184	220	157	63
Average Depth to Water:														107 feet	
Minimum Depth:														0 feet	
Maximum Depth:														165 feet	

Record Count: 5

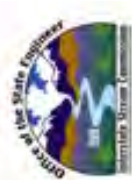
UTMNAD83 Radius Search (in meters):

Easting (X): 634834.14 Northing (Y): 3726079.62 Radius: 10000

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/22/24 10:31 AM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

Well Tag

POD Number

L 13691 POD1

Q64 Q16 Q4 Sec Tws Rng

1 1 4 22 09S 32E

(NAD83 UTM in meters)

X Y

637362 3725298

X

Driller License:

1058

Driller Name:

CLINTON KEY

Driller Company:

KEY'S DRILLING & PUMP SERVICE

Drill Start Date:

02/25/2015

Drill Finish Date:

02/25/2015

Log File Date:

03/09/2015

PCW Rev Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

4.50

Depth Well:

150 feet

Source:

Shallow

Estimated Yield:

30 GPM

Depth Water:

X

Water Bearing Stratifications:

Top Bottom Description

55 65 Sandstone/Gravel/Conglomerate

70 143 Sandstone/Gravel/Conglomerate

X

Casing Perforations:

Top Bottom

65 150

X

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/22/24 9:47 AM

POINT OF DIVERSION SUMMARY

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
L-13691-POD 1 Map

Legend

- 1.64 Miles
- Haley Water Station
- L-13691-POD 1



Haley Water Station



L-13691-POD 1

Google Earth



1 mi



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

site_no list =

- 333942103313401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 333942103313401 07S.33E.35.424143

Available data for this site

Groundwater: Field measurements

GO

Roosevelt County, New Mexico

Hydrologic Unit Code 12080001

Latitude 33°39'43", Longitude 103°31'42" NAD27

Land-surface elevation 4,337.00 feet above NGVD29

The depth of the well is 258 feet below land surface.

This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

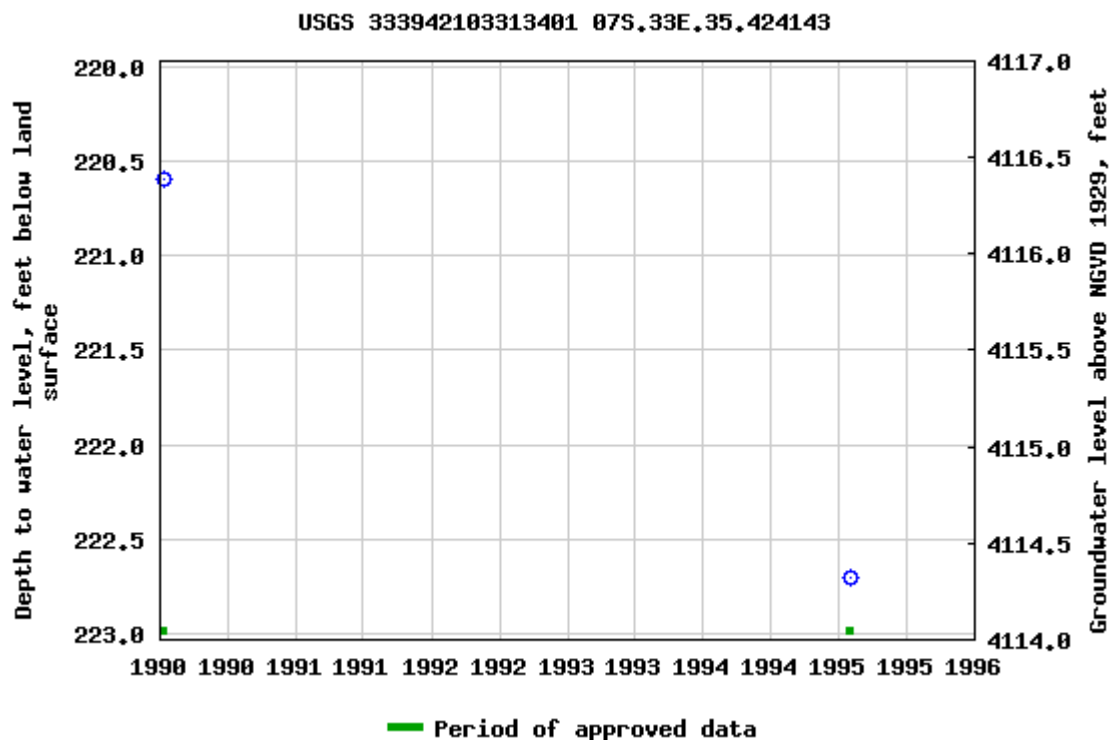
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)




Page Last Modified: 2024-02-26 10:01:19 EST

0.64 0.58 nadww02

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
USGS 334206103334201

Legend

-  2.67 Miles
-  Haley Water Station
-  USGS 334206103334201

USGS 334206103334201

Haley Water Station

Google Earth

2 mi

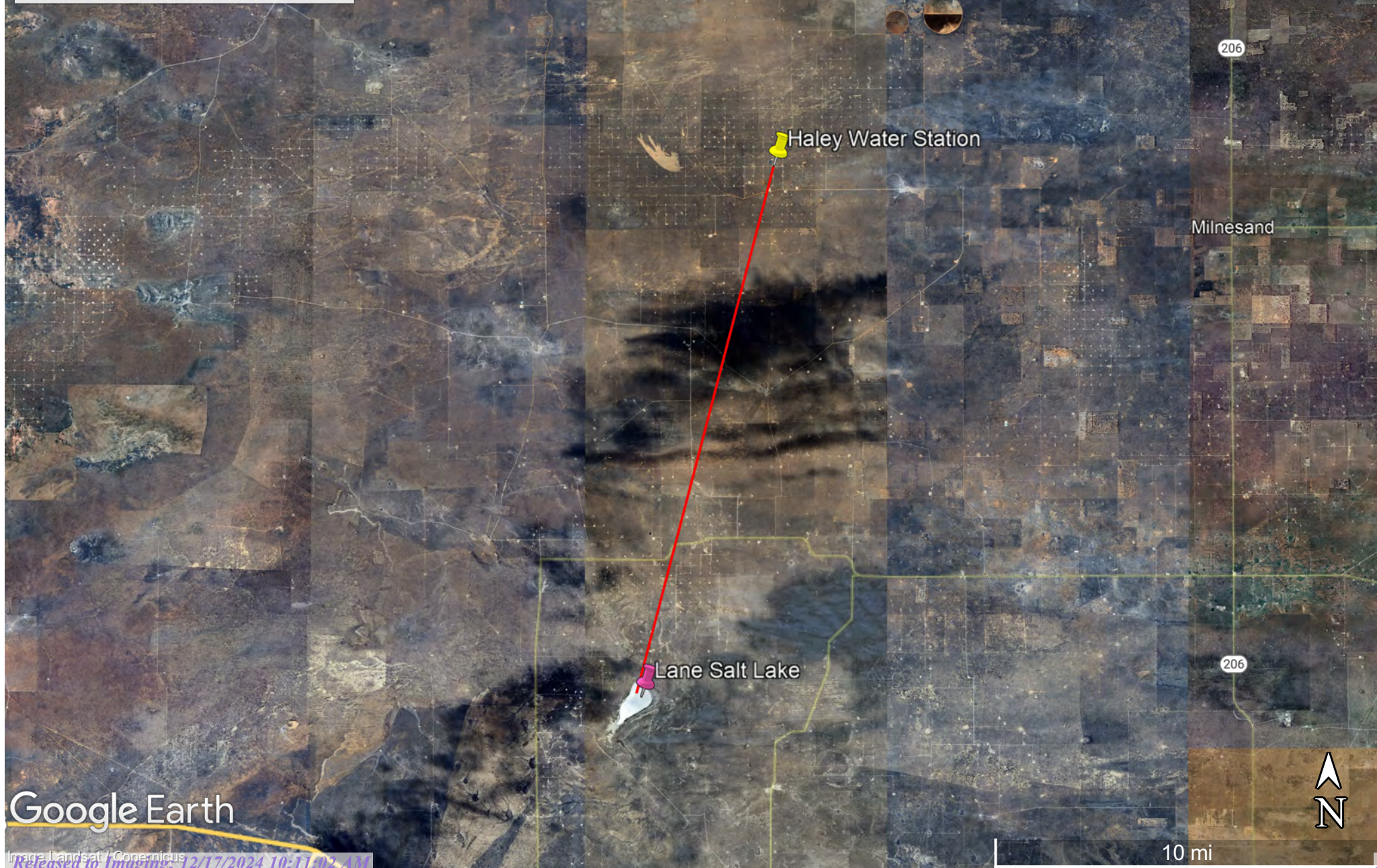


Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Surface Water

Legend

- 14.07 Miles
- Haley Water Station
- Lane Salt Lake



Google Earth



Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Amarose loamy fine sand, 0 to 3 percent slopes---Roosevelt County,
New Mexico

Roosevelt County, New Mexico

AqB—Amarose loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1idyj

Elevation: 2,500 to 4,600 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 57 to 63 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Amarose and similar soils: 85 percent

Minor components: 15 percent

*Estimates are based on observations, descriptions, and transects of
the mapunit.*

Description of Amarose

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy eolian deposits

Typical profile

A - 0 to 10 inches: loamy fine sand

Bt1 - 10 to 34 inches: sandy clay loam

Bt2 - 34 to 42 inches: fine sandy loam

Btk - 42 to 80 inches: loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 55 percent

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Moderate (about 8.2
inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Map Unit Description: Amarose loamy fine sand, 0 to 3 percent slopes---Roosevelt County,
New Mexico

Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Minor Components

Elida

Percent of map unit: 8 percent
Landform: Playa slopes, plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Concave, linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Douro

Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Triomas

Percent of map unit: 3 percent
Landform: Plains
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Roosevelt County, New Mexico
Survey Area Data: Version 20, Sep 7, 2023

Soil Map—Roosevelt County, New Mexico



Natural Resources
Conservation Service


Web Soil Survey
National Cooperative Soil Survey

11/19/2024
Page 1 of 3


Soil Map—Roosevelt County, New Mexico

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Roosevelt County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 5, 2021—Feb 8, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

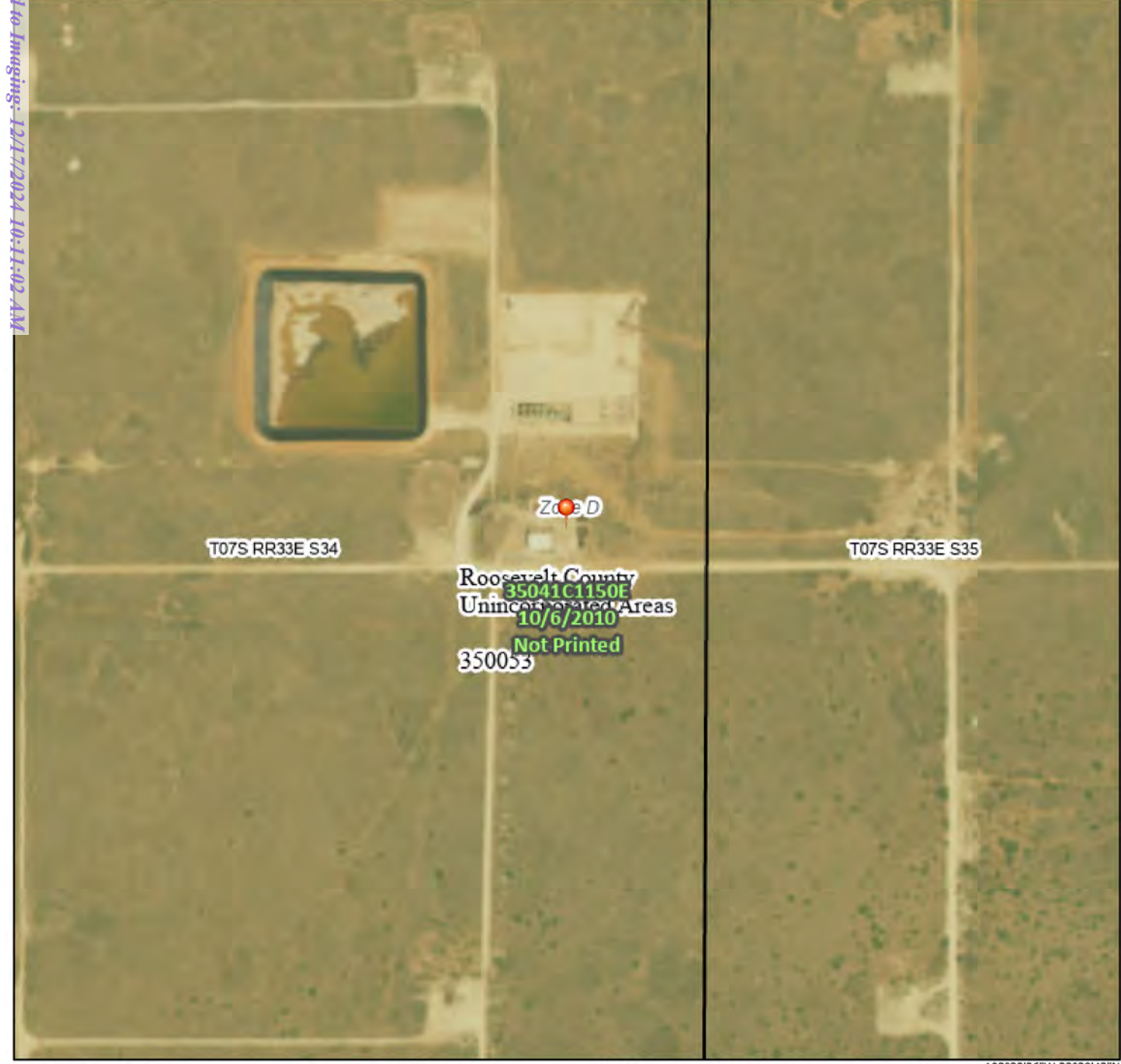
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AqB	Amarose loamy fine sand, 0 to 3 percent slopes	11.3	100.0%
Totals for Area of Interest		11.3	100.0%

National Flood Hazard Layer FIRMette



103°33'3"W 33°40'13"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°32'26"W 33°39'43"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone X
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
	MAP PANELS	
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/22/2024 at 11:51 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Released to Imaging: 12/17/2024 10:11:02 AM

Received by OCD: 12/17/2024 10:22:23 AM

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Wetlands



February 22, 2024

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Pima Environmental Services

Appendix C

48-Hour Sampling Notification

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 390323

QUESTIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 390323
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1906042331
Incident Name	NAB1906042331 HALEY WATER STATION @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fCH1903857157] HALEY WATER STATION

Location of Release Source	
Site Name	HALEY WATER STATION
Date Release Discovered	02/13/2019
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	400
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/08/2024
Time sampling will commence	04:00 PM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Andrew Franco (806) 200-0054
Please provide any information necessary for navigation to sampling site	33.665939, -103.545737

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 390323

CONDITIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 390323
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
chinojosa	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	10/7/2024



Pima Environmental Services

Appendix D

Photographic Documentation



PHOTOGRAPHIC DOCUMENTATION

SITE NAME: Haley Water Station

Assessment



Site information sign.



Photo of the site tech assessing the release area.



Photo of the site tech assessing the release area.

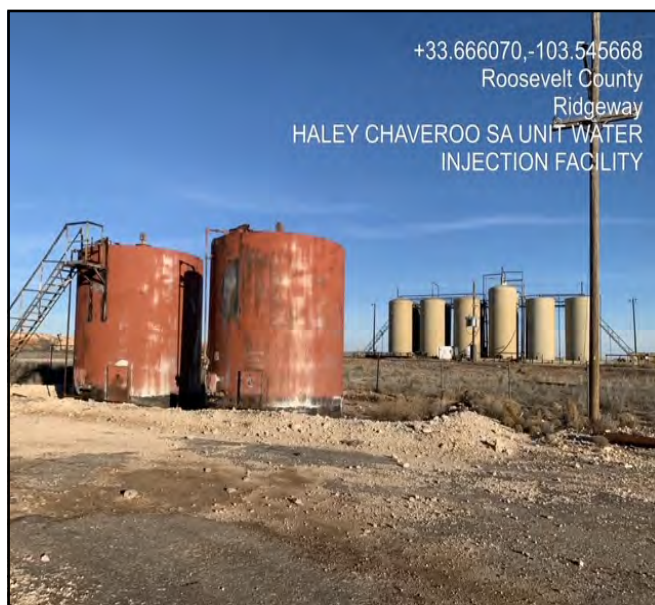


Photo of the site tech assessing the release area.



Photo of the site tech assessing the release area.



Photo of the site tech assessing the release area.



Photo of the site tech assessing the release area.

PHOTOGRAPHIC DOCUMENTATION

SITE NAME: Haley Water Station

Pre-Excavation



Photograph of the release area prior to the start of the excavation facing East.



Photograph of the release area prior to the start of the excavation facing Northwest.



Photograph of the release area prior to the start of the excavation facing Southeast.

PHOTOGRAPHIC DOCUMENTATION

SITE NAME: Haley Water Station

Excavation



Photograph of the excavation process facing Southeast.



Photograph of the excavation process facing Northeast.



Photograph of the excavation process facing Southeast.



Photograph of the excavation process facing West.

PHOTOGRAPHIC DOCUMENTATION

SITE NAME: Haley Water Station

Backfill



Photograph of the excavation completed facing Northwest.



Photograph of the excavation completed facing Northeast.



Photograph of the excavation completed facing West.



Photograph of the excavation completed facing Northeast.



Pima Environmental Services

Appendix E

Laboratory Reports

Report to:
Tom Bynum



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Haley Chavaroo SA Unit Water
Injection facility

Work Order: E402054

Job Number: 21064-0001

Received: 2/6/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/13/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 2/13/24

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Haley Chavaroo SA Unit Water Injection facility
Workorder: E402054
Date Received: 2/6/2024 7:51:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/6/2024 7:51:00AM, under the Project Name: Haley Chavaroo SA Unit Water Injection facility.

The analytical test results summarized in this report with the Project Name: Haley Chavaroo SA Unit Water Injection facility apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	
			02/13/24 14:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1 - 1'	E402054-01A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S1 - 2'	E402054-02A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S1 - 3'	E402054-03A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S1 - 4'	E402054-04A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2 - 1'	E402054-05A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2 - 2	E402054-06A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2-3'	E402054-07A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2-4'	E402054-08A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-1'	E402054-09A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-2'	E402054-10A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-3'	E402054-11A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-4'	E402054-12A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-1'	E402054-13A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-2'	E402054-14A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-3'	E402054-15A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-4'	E402054-16A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW1	E402054-17A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW2	E402054-18A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW3	E402054-19A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW4	E402054-20A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW5	E402054-21A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW6	E402054-22A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW7	E402054-23A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW8	E402054-24A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW9	E402054-25A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW10	E402054-26A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW11	E402054-27A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
BG1	E402054-28A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
---	---	----------------------------------

S1 - 1'

E402054-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	95.3 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	95.3 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane	112 %	50-200		02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S1 - 2'

E402054-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		106 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		106 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S1 - 3'

E402054-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		112 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S1 - 4'

E402054-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.0 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.0 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	25.8	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		116 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
---	---	----------------------------------

S2 - 1'

E402054-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	95.2 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	95.2 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane	111 %	50-200		02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S2 - 2

E402054-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		96.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		96.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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S2-3'

E402054-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	94.8 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	94.8 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane	112 %	50-200		02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S2-4'

E402054-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		112 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S3-1'

E402054-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.6 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.6 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	59.9	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	90.2	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		111 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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S3-2'

E402054-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		107 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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S3-3'

E402054-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	138	50.0	2	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	173	100	2	02/08/24	02/09/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S3-4'

E402054-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.4 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.4 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		116 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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S4-1'

E402054-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	113	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	126	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		117 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

S4-2'

E402054-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		114 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	35.4	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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S4-3'

E402054-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		107 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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S4-4'

E402054-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.3 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.3 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW1

E402054-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW2

E402054-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.9 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.9 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		115 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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SW3

E402054-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		112 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW4

E402054-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		114 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW5

E402054-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		106 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW6

E402054-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.3 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.3 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		106 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:58:09PM
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SW7

E402054-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		115 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		115 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		107 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW8

E402054-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		114 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		105 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		114 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		105 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		105 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:58:09PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

SW9

E402054-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY		Batch: 2406069	
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		107 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2406069	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		107 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406073	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		107 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2406060	
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW10

E402054-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		105 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

SW11

E402054-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.5 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		111 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.5 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		111 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		103 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:58:09PM

BG1

E402054-28

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		113 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		113 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		108 %	50-200	02/07/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2406060
Chloride	ND	20.0	1	02/06/24	02/08/24	



Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406039-BLK1)

Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.540		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.475		0.500		94.9	70-130			

LCS (2406039-BS1)

Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	3.01	0.0250	2.50		120	70-130			
Ethylbenzene	2.57	0.0250	2.50		103	70-130			
Toluene	2.55	0.0250	2.50		102	70-130			
o-Xylene	2.52	0.0250	2.50		101	70-130			
p,m-Xylene	4.94	0.0500	5.00		98.8	70-130			
Total Xylenes	7.46	0.0250	7.50		99.5	70-130			
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.472		0.500		94.4	70-130			

Matrix Spike (2406039-MS1)

Source: E402054-06

Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	3.04	0.0250	2.50	ND	122	48-131			
Ethylbenzene	2.61	0.0250	2.50	ND	104	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.56	0.0250	2.50	ND	103	43-135			
p,m-Xylene	5.08	0.0500	5.00	ND	102	43-135			
Total Xylenes	7.65	0.0250	7.50	ND	102	43-135			
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.474		0.500		94.8	70-130			

Matrix Spike Dup (2406039-MSD1)

Source: E402054-06

Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	3.09	0.0250	2.50	ND	124	48-131	1.48	23	
Ethylbenzene	2.68	0.0250	2.50	ND	107	45-135	2.42	27	
Toluene	2.66	0.0250	2.50	ND	107	48-130	3.42	24	
o-Xylene	2.68	0.0250	2.50	ND	107	43-135	4.31	27	
p,m-Xylene	5.27	0.0500	5.00	ND	105	43-135	3.62	27	
Total Xylenes	7.95	0.0250	7.50	ND	106	43-135	3.85	27	
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.481		0.500		96.1	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406069-BLK1) Prepared: 02/07/24 Analyzed: 02/10/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.453		0.500		90.5	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2406069-BS1) Prepared: 02/07/24 Analyzed: 02/10/24

Benzene	2.42	0.0250	2.50		96.7	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.49	0.0250	2.50		99.6	70-130			
o-Xylene	2.61	0.0250	2.50		104	70-130			
p,m-Xylene	5.17	0.0500	5.00		103	70-130			
Total Xylenes	7.78	0.0250	7.50		104	70-130			
Surrogate: Bromofluorobenzene	0.585		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.456		0.500		91.1	70-130			
Surrogate: Toluene-d8	0.530		0.500		106	70-130			

LCS Dup (2406069-BSD1) Prepared: 02/07/24 Analyzed: 02/10/24

Benzene	2.51	0.0250	2.50		100	70-130	3.74	23	
Ethylbenzene	2.63	0.0250	2.50		105	70-130	2.05	27	
Toluene	2.54	0.0250	2.50		102	70-130	2.01	24	
o-Xylene	2.71	0.0250	2.50		109	70-130	4.00	27	
p,m-Xylene	5.32	0.0500	5.00		106	70-130	2.74	27	
Total Xylenes	8.03	0.0250	7.50		107	70-130	3.16	27	
Surrogate: Bromofluorobenzene	0.618		0.500		124	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406039-BLK1) Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.540		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.475		0.500		94.9	70-130			

LCS (2406039-BS2) Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	51.3	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.2	70-130			
Surrogate: Toluene-d8	0.481		0.500		96.1	70-130			

Matrix Spike (2406039-MS2) Source: E402054-06 Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	54.2	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.484		0.500		96.8	70-130			

Matrix Spike Dup (2406039-MSD2) Source: E402054-06 Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	53.5	20.0	50.0	ND	107	70-130	1.26	20	
Surrogate: Bromofluorobenzene	0.548		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.8	70-130			
Surrogate: Toluene-d8	0.482		0.500		96.3	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406069-BLK1) Prepared: 02/07/24 Analyzed: 02/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.453		0.500		90.5	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2406069-BS2) Prepared: 02/07/24 Analyzed: 02/10/24

Gasoline Range Organics (C6-C10)	53.8	20.0	50.0		108	70-130			
Surrogate: Bromofluorobenzene	0.569		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.450		0.500		90.0	70-130			
Surrogate: Toluene-d8	0.553		0.500		111	70-130			

LCS Dup (2406069-BSD2) Prepared: 02/07/24 Analyzed: 02/10/24

Gasoline Range Organics (C6-C10)	52.9	20.0	50.0		106	70-130	1.51	20	
Surrogate: Bromofluorobenzene	0.576		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.450		0.500		89.9	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406073-BLK1)					Prepared: 02/07/24 Analyzed: 02/07/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.2		50.0		100	50-200			

LCS (2406073-BS1)					Prepared: 02/07/24 Analyzed: 02/07/24				
Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	52.0		50.0		104	50-200			

Matrix Spike (2406073-MS1)					Source: E402049-24		Prepared: 02/07/24 Analyzed: 02/07/24		
Diesel Range Organics (C10-C28)	256	25.0	250	ND	102	38-132			
Surrogate: n-Nonane	48.9		50.0		97.9	50-200			

Matrix Spike Dup (2406073-MSD1)					Source: E402049-24		Prepared: 02/07/24 Analyzed: 02/07/24		
Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132	1.69	20	
Surrogate: n-Nonane	49.0		50.0		97.9	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406078-BLK1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.8		50.0		112	50-200			

LCS (2406078-BS1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Diesel Range Organics (C10-C28)	278	25.0	250		111	38-132			
Surrogate: n-Nonane	56.2		50.0		112	50-200			

Matrix Spike (2406078-MS1)				Source: E402054-04		Prepared: 02/08/24 Analyzed: 02/09/24			
Diesel Range Organics (C10-C28)	335	25.0	250	25.8	124	38-132			
Surrogate: n-Nonane	52.6		50.0		105	50-200			

Matrix Spike Dup (2406078-MSD1)				Source: E402054-04		Prepared: 02/08/24 Analyzed: 02/09/24			
Diesel Range Organics (C10-C28)	299	25.0	250	25.8	109	38-132	11.4	20	
Surrogate: n-Nonane	52.1		50.0		104	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406057-BLK1)				Prepared: 02/06/24 Analyzed: 02/07/24					
Chloride	ND	20.0							
LCS (2406057-BS1)				Prepared: 02/06/24 Analyzed: 02/07/24					
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2406057-MS1)				Source: E402054-03		Prepared: 02/06/24 Analyzed: 02/07/24			
Chloride	262	20.0	250	ND	105	80-120			
Matrix Spike Dup (2406057-MSD1)				Source: E402054-03		Prepared: 02/06/24 Analyzed: 02/07/24			
Chloride	262	20.0	250	ND	105	80-120	0.163	20	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:58:09PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406060-BLK1)					Prepared: 02/06/24 Analyzed: 02/08/24				
Chloride	ND	20.0							
LCS (2406060-BS1)					Prepared: 02/06/24 Analyzed: 02/08/24				
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2406060-MS1)					Source: E402054-21		Prepared: 02/06/24 Analyzed: 02/08/24		
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2406060-MSD1)					Source: E402054-21		Prepared: 02/06/24 Analyzed: 02/08/24		
Chloride	256	20.0	250	ND	102	80-120	0.0418	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	02/13/24 14:58

- ND Analyte NOT DETECTED at or above the reporting limit
 - NR Not Reported
 - RPD Relative Percent Difference
 - DNI Did Not Ignite
 - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 3

Hailey Chavarro SA Unit Water Injection Facility

Client: Pima Environmental Services

Project:

Project Manager: Tom Bynum

Address: 5614 N. Lovington Hwy.

City, State, Zip Hobbs, NM. 88240

Phone: 580-748-1613

Email: tom@pimaoil.com

Report due by:

Bill To

Attention: Ridgeway Arizona Oil Corp

Address:

City, State, Zip

Phone:

Email:

Pima Project # 7-301

Lab Use Only

Lab WO#

E 402054

Job Number

210104-0001

TAT

1D

2D

3D

Standard

EPA Program

CWA

SDWA

Analysis and Method

RCRA

State

NM

CO

UT

AZ

TX

Remarks

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
7:00	2/3	S	1	S1-1'	1							X		
7:05				S1-2'	2									
7:11				S1-3'	3									
7:19				S1-4'	4									
7:26				S2-1'	5									
7:31				S2-2'	6									
7:39				S2-3'	7									
7:41				S2-4'	8									
7:56				S3-1'	9									
8:11				S3-2'	10									

Additional Instructions:

Billing #0 Pima Environmental

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
Ernie Rame	2/5/24	2:53	Michelle Gyl	2-5-24	1503	Received on ice: (Y) / N
Michelle Gyl	2-5-24	1730	Andrew Moss	2-5-24	1730	T1 _____ T2 _____ T3 _____
Andrew Moss	2-5-24	2330	AD	2-5-24	0751	AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


envirotech

Chain of Custody

Client: Pima Environmental Services
Project:
Project Manager: Tom Bynum
Address: 5614 N. Lovington Hwy.
City, State, Zip Hobbs, NM, 88240
Phone: 580-748-1613
Email: tom@pimaoil.com
Report due by:

Bill To

Address: _____
City, State, Zip _____
Phone: _____
Email: _____
Pima Project # 7-301

TAT

1D	2D	3D	Standard
			X

CWA	SDWA
-----	------

--	--

Analysis and Method

	RCRA
--	------

State

NM	CO	UT	AZ	TX	
✓					

Remarks

Additional Instructions: *Billing to Pima Environmental*

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Sampled by:

Received by: (Signature)	Date	Time
<i>[Signature]</i>	2-5-24	1803
Received by: (Signature)	Date	Time
<i>[Signature]</i>	2-5-24	1730
Received by: (Signature)	Date	Time
<i>[Signature]</i>	2-5-24	0751

	Lab Use Only
--	--------------

Received on ice: (Y) / N

T1	T2	T3
----	----	----

AVG Temp °C 9

Sample Matrix: S - Soil, Sd - Solid, Sp - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Project Information

Chain of Custody

Page 3 of 3

Haley Chavarro SA Unit Water Injection Facility

Client: Pima Environmental Services

Project:

Project Manager: Tom Bynum

Address: 5614 N. Lovington Hwy.

City, State, Zip Hobbs, NM, 88240

Phone: 580-748-1613

Email: tom@pimaoil.com

Report due by:

Bill To

Attention: Ridge Way Arizona Di/L Corp

Address:

City, State, Zip

Phone:

Email:

Pima Project # 7-301

Lab Use Only

Lab WO#

E402054

Job Number

21004-0001

TAT

1D

2D

3D

Standard

EPA Program

CWA

SDWA

RCRA

State

NM

CO

UT

AZ

TX

Remarks

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
9:21	2/3	S	1	SW5	21							X		
9:36			1	SW6	22									
9:45			1	SW7	23									
9:51			1	SW8	24									
9:55			1	SW9	25									
10:01			1	SW10	26									
10:05			1	SW11	27									
10:11			1	BG1	28									

Additional Instructions:

Bill to Pima

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
Karime Achame	2-5-24	2:53	Michelle Guey	2-5-24	1503	Received on ice: (Y) / N
Michelle Guey	2-5-24	1730	London	2-5-24	1730	T1 T2 T3
London	2-5-24	2330	Agri	2-5-24	0751	AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 2/6/2024 4:09:57PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	02/06/24 07:51	Work Order ID:	E402054
Phone:	(575) 631-6977	Date Logged In:	02/06/24 07:50	Logged In By:	Angelina Pineda
Email:	tom@pimaoil.com	Due Date:	02/12/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

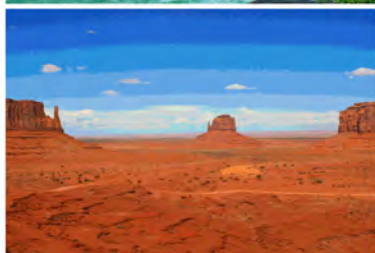
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Gio Gomez



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Haley Water Facility

Work Order: E410137

Job Number: 21064-0001

Received: 10/15/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/15/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 10/15/24

Gio Gomez
PO Box 247
Plains, TX 79355-0247



Project Name: Haley Water Facility
Workorder: E410137
Date Received: 10/15/2024 8:00:00AM

Gio Gomez,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/15/2024 8:00:00AM, under the Project Name: Haley Water Facility.

The analytical test results summarized in this report with the Project Name: Haley Water Facility apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzaless@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Haley Water Facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	10/15/24 14:45

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS1-4'	E410137-01A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
CSW1-4'	E410137-02A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
CSW2-2'	E410137-03A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.
CS2-2'	E410137-04A	Soil	10/11/24	10/15/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Water Facility
Project Number: 21064-0001
Project Manager: Gio Gomez

Reported:
10/15/2024 2:45:42PM

CS1-4'

E410137-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442050	
Benzene	ND	0.0250	1	10/15/24	10/15/24	
Ethylbenzene	ND	0.0250	1	10/15/24	10/15/24	
Toluene	ND	0.0250	1	10/15/24	10/15/24	
o-Xylene	ND	0.0250	1	10/15/24	10/15/24	
p,m-Xylene	ND	0.0500	1	10/15/24	10/15/24	
Total Xylenes	ND	0.0250	1	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.4 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442050	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.4 %	70-130		10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442055	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>	102 %	50-200		10/15/24	10/15/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM		Batch: 2442054	
Chloride	ND	20.0	1	10/15/24	10/15/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Water Facility
Project Number: 21064-0001
Project Manager: Gio Gomez

Reported:
10/15/2024 2:45:42PM

CSW1-4'

E410137-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442050	
Benzene	ND	0.0250	1	10/15/24	10/15/24	
Ethylbenzene	ND	0.0250	1	10/15/24	10/15/24	
Toluene	ND	0.0250	1	10/15/24	10/15/24	
o-Xylene	ND	0.0250	1	10/15/24	10/15/24	
p,m-Xylene	ND	0.0500	1	10/15/24	10/15/24	
Total Xylenes	ND	0.0250	1	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442050	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.3 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442055	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>						
		98.3 %	50-200	10/15/24	10/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2442054	
Chloride	ND	20.0	1	10/15/24	10/15/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Water Facility
Project Number: 21064-0001
Project Manager: Gio Gomez

Reported:
10/15/2024 2:45:42PM

CSW2-2'

E410137-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442050	
Benzene	ND	0.0250	1	10/15/24	10/15/24	
Ethylbenzene	ND	0.0250	1	10/15/24	10/15/24	
Toluene	ND	0.0250	1	10/15/24	10/15/24	
o-Xylene	ND	0.0250	1	10/15/24	10/15/24	
p,m-Xylene	ND	0.0500	1	10/15/24	10/15/24	
Total Xylenes	ND	0.0250	1	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442050	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.0 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442055	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	10/15/24	10/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2442054	
Chloride	ND	20.0	1	10/15/24	10/15/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Water Facility
Project Number: 21064-0001
Project Manager: Gio Gomez

Reported:
10/15/2024 2:45:42PM

CS2-2'

E410137-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2442050
Benzene	ND	0.0250	1	10/15/24	10/15/24	
Ethylbenzene	ND	0.0250	1	10/15/24	10/15/24	
Toluene	ND	0.0250	1	10/15/24	10/15/24	
o-Xylene	ND	0.0250	1	10/15/24	10/15/24	
p,m-Xylene	ND	0.0500	1	10/15/24	10/15/24	
Total Xylenes	ND	0.0250	1	10/15/24	10/15/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2442050
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/15/24	10/15/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.4 %	70-130	10/15/24	10/15/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442055
Diesel Range Organics (C10-C28)	ND	25.0	1	10/15/24	10/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/15/24	10/15/24	
<i>Surrogate: n-Nonane</i>						
		97.7 %	50-200	10/15/24	10/15/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2442054
Chloride	ND	20.0	1	10/15/24	10/15/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Water Facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	10/15/2024 2:45:42PM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2442050-BLK1) Prepared: 10/14/24 Analyzed: 10/15/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.25		8.00		103	70-130			

LCS (2442050-BS1) Prepared: 10/14/24 Analyzed: 10/15/24

Benzene	5.34	0.0250	5.00		107	70-130			
Ethylbenzene	5.17	0.0250	5.00		103	70-130			
Toluene	5.27	0.0250	5.00		105	70-130			
o-Xylene	5.19	0.0250	5.00		104	70-130			
p,m-Xylene	10.5	0.0500	10.0		105	70-130			
Total Xylenes	15.7	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.22		8.00		103	70-130			

LCS Dup (2442050-BSD1) Prepared: 10/14/24 Analyzed: 10/15/24

Benzene	5.32	0.0250	5.00		106	70-130	0.340	20	
Ethylbenzene	5.19	0.0250	5.00		104	70-130	0.328	20	
Toluene	5.27	0.0250	5.00		105	70-130	0.0436	20	
o-Xylene	5.22	0.0250	5.00		104	70-130	0.472	20	
p,m-Xylene	10.5	0.0500	10.0		105	70-130	0.572	20	
Total Xylenes	15.8	0.0250	15.0		105	70-130	0.538	20	
Surrogate: 4-Bromochlorobenzene-PID	8.30		8.00		104	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Water Facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	10/15/2024 2:45:42PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2442050-BLK1) Prepared: 10/14/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.52		8.00		94.0	70-130			

LCS (2442050-BS2) Prepared: 10/14/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	38.8	20.0	50.0		77.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.70		8.00		96.2	70-130			

LCS Dup (2442050-BSD2) Prepared: 10/14/24 Analyzed: 10/15/24

Gasoline Range Organics (C6-C10)	38.5	20.0	50.0		77.0	70-130	0.685	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.3	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Water Facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	10/15/2024 2:45:42PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2442055-BLK1) Prepared: 10/15/24 Analyzed: 10/15/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.4		50.0		94.9	50-200			

LCS (2442055-BS1) Prepared: 10/15/24 Analyzed: 10/15/24

Diesel Range Organics (C10-C28)	247	25.0	250		98.6	38-132			
Surrogate: n-Nonane	48.6		50.0		97.3	50-200			

LCS Dup (2442055-BSD1) Prepared: 10/15/24 Analyzed: 10/15/24

Diesel Range Organics (C10-C28)	244	25.0	250		97.7	38-132	0.980	20	
Surrogate: n-Nonane	50.1		50.0		100	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Water Facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	10/15/2024 2:45:42PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2442054-BLK1)					Prepared: 10/15/24 Analyzed: 10/15/24				
Chloride	ND	20.0							
LCS (2442054-BS1)					Prepared: 10/15/24 Analyzed: 10/15/24				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2442054-MS1)					Source: E410138-03		Prepared: 10/15/24 Analyzed: 10/15/24		
Chloride	254	20.0	250	ND	101	80-120			
Matrix Spike Dup (2442054-MSD1)					Source: E410138-03		Prepared: 10/15/24 Analyzed: 10/15/24		
Chloride	254	20.0	250	ND	102	80-120	0.0422	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Haley Water Facility	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Gio Gomez	10/15/24 14:45

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: Pima Environmental Services		Bill To		Lab Use Only				TAT				EPA Program					
Project: <u>Hakey Water Facility</u>		Attention: <u>Ridgeway</u>		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: <u>Gio Gomez</u>		Address:		<u>E3410137</u>		<u>21064-0001</u>		<input checked="" type="checkbox"/>									
Address: <u>5614 N. Lovington Hwy.</u>		City, State, Zip		Analysis and Method									RCRA				
City, State, Zip <u>Hobbs, NM, 88240</u>		Phone:		TO by 8015 TO by 8015 8021 8260 6010 300.0 NM TX									State				
Phone: <u>806-782-1151</u>		Email:											NM	CO	UT	AZ	TX
Email: <u>gio@pimaoil.com</u>		Pima Project # <u>7-2-1</u>											<input checked="" type="checkbox"/>				
Report due by:																	

[illegible]

Additional Instructions:						Bill to Pima					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Sampled by:						Lab Use Only					
Relinquished by: (Signature) Kerime Hame	Date 10/14/24	Time 7:48	Received by: (Signature) Michelle Gonzales	Date 10-14-24	Time 1348	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N					
Relinquished by: (Signature) Michelle Gonzales	Date 10-14-24	Time 1640	Received by: (Signature) L.H.	Date 10-14-24	Time 1640	T1 _____ T2 _____ T3 _____					
Relinquished by: (Signature) L.H.	Date 10-14-24	Time 2245	Received by: (Signature) Cathy Mann	Date 10-15-24	Time 8:00	AVG Temp °C <u>4</u>					
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____						Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.											

Envirotech Analytical Laboratory

Printed: 10/15/2024 10:36:33AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	10/15/24 08:00	Work Order ID:	E410137
Phone:	(575) 631-6977	Date Logged In:	10/14/24 14:54	Logged In By:	Caitlin Mars
Email:	gio@pimaoil.com	Due Date:	10/15/24 17:00 (0 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
 2. Does the number of samples per sampling site location match the COC? Yes
 3. Were samples dropped off by client or carrier? Yes
 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
 5. Were all samples received within holding time? Yes
- Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Sampled by and no of containers not provided on COC per client.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

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Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 408448

QUESTIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1906042331
Incident Name	NAB1906042331 HALEY WATER STATION @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fCH1903857157] HALEY WATER STATION

Location of Release Source	
Please answer all the questions in this group.	
Site Name	HALEY WATER STATION
Date Release Discovered	02/13/2019
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 50 BBL Recovered: 30 BBL Lost: 20 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 408448

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Charles Hinojosa Title: Operations Manager Email: chinojosa@pedevco.com Date: 12/04/2024
--	--

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QUESTIONS, Page 3

Action 408448

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	35.4
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	311
GRO+DRO (EPA SW-846 Method 8015M)	138
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	10/03/2024
On what date will (or did) the final sampling or liner inspection occur	10/08/2024
On what date will (or was) the remediation complete(d)	10/09/2024
What is the estimated surface area (in square feet) that will be reclaimed	400
What is the estimated volume (in cubic yards) that will be reclaimed	37
What is the estimated surface area (in square feet) that will be remediated	400
What is the estimated volume (in cubic yards) that will be remediated	37

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 408448

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	GANDY MARLEY LANDFARM/LANDFILL [FEEM0112338393]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Charles Hinojosa Title: Operations Manager Email: chinojosa@pedevco.com Date: 12/04/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 408448

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 408448

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:
	164557
	Action Number:
	408448
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	390323
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/08/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	400

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	400
What was the total volume (cubic yards) remediated	37
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	400
What was the total volume (in cubic yards) reclaimed	37
Summarize any additional remediation activities not included by answers (above)	Standard remediation as outlined above, and to closure criteria required.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Charles Hinojosa Title: Operations Manager Email: chinojosa@pedevco.com Date: 12/04/2024
--	--

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QUESTIONS, Page 7

Action 408448

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 408448

CONDITIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 408448
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation closure approved.	12/17/2024